

ABSTRACT

Expressing a perveance of an electron gun to be determined by a form of the electron gun as $P\mu$, a voltage to be impressed on an accelerating electrode V_a and a beam current I_b , voltage V_a which satisfies the following expression,

$$I_b < P\mu \times V_a^{3/2}$$

is impressed on the accelerating electrode.

Further, the electric potential of the accelerating electrode is maintained at the highest level of all electrodes in the electron tube at all times.